SONY

Portable IC Audio Player

Network Walkman

Operating Instructions

WALKMAN

NW-E2

For customers in the United States

Owner's Record

The model and serial numbers are located on the bottom of the player. Record the serial number in the space provided below. Refer to them whenever you call your Sony dealer regarding this product.

Model No. NW-E2

Serial No. _____

INFORMATION:

This equipment has been tested and found to comply with the limits for a Class B digital device, pursuant to Part 15 of the FCC Rules. These limits are designed to provide reasonable protection against harmful interference in a residential installation. This equipment generates, uses, and can radiate radio frequency energy and, if not installed and used in accordance with the instructions, may cause harmful interference to radio communications.

However, there is no guarantee that interference will not occur in a particular installation. If this equipment does cause harmful interference to radio or television reception, which can be determined by turning the equipment off and on, the user is encouraged to try to correct the interference using one or more of the following measures:
– Reorient or relocate the receiving antenna.
– Increase the separation between the equipment and receiver.
– Connect the equipment into an outlet on a circuit different from that to which the receiver is connected.
– Consult the dealer or an experienced radio/TV technician for help.

You are cautioned that any changes or modifications not expressly approved in this manual could void your authority to operate this equipment.

If you have any questions about this product, you may call:
Sony Direct Response Center 1-(800)-222-7669

or write to:
Sony Direct Response Center 12451 Gateway Blvd.Fort Myers, FL 33913

Declaration of Conformity

Trade Name:	SONY
Model No.:	NW-E2
Responsible Party:	Sony Electronics Inc.
Address:	1 Sony Drive, Park Ridge, NJ.07656 USA
Telephone No.:	201-930-6972

This device complies with Part 15 of the FCC Rules. Operation is subject to the following two conditions: (1) This device may not cause harmful interference, and (2) this device must accept any interference received, including interference that may cause undesired operation.

SONY® NW-E2

FC Tested To Comply With FCC Standards

FOR HOME OR OFFICE USE

Notice for users

On the supplied software

• Copyright laws prohibit reproducing the software or the manual accompanying it in whole or in part, or renting the software without the permission of the copyright holder.
• In no event will SONY be liable for any financial damage, or loss of profits, including claims made by third parties, arising out of the use of the software supplied with this player.
• In the event a problem occurs with this software as a result of defective manufacturing, SONY will replace it.
However, SONY bears no other responsibility.
• The software provided with this player cannot be used with equipment other than that which is so designated.
• Please note that, due to continued efforts to improve quality, the software specifications may be changed without notice.
• Operation of this player with software other than that provided is not covered by the warranty.

Program©2000 Sony Corporation
Documentation©2000 Sony Corporation

NOTES:

• The recorded music is limited to private use only. Use of the music beyond this limit requires permission of the copyright holders.
• Sony is not responsible for music files that are not saved on your computer due to unsuccessful recording from CD or music downloading.
• The OpenMG Jukebox software encrypts data in order to protect the copyright of music files. This software is not equipped with a Back-Up/ Restore function. Music files may be deleted from your computer in the event of a system crash or while attempting to restore your computer's hard drive using recovery CDs. Please refer to OpenMG.com for any updates on this topic.
• If your PC has optical output, the music played back on OpenMG Jukebox will not send digital data through that optical output.

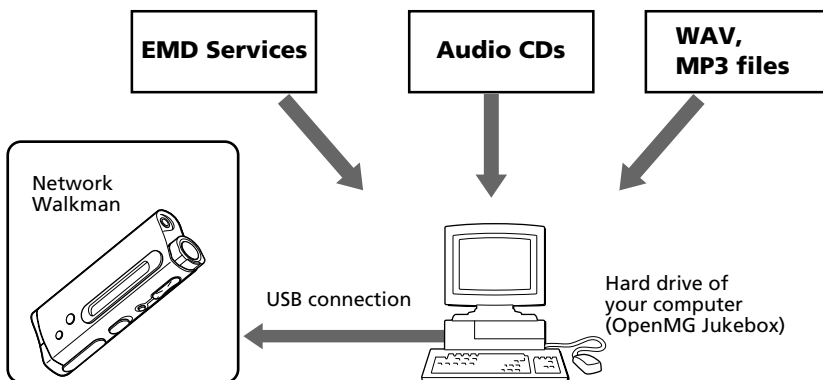# Table of Contents

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Notes
- The illustrations in this manual may differ from the actual software.
- Explanations in this manual assume that you are familiar with basic operations of Windows 98. For how to use your computer and operating system, please refer to the respective manuals.

Overview

What you can do with "Network Walkman"

Network Walkman is a portable IC audio player. You can easily transfer digital sound data from your computer to Network Walkman.

The OpenMG compliant software "OpenMG Jukebox," which is supplied with your Network Walkman enables you to store digital music data on your computer's hard drive, manage playlists, and transfer music to Network Walkman.
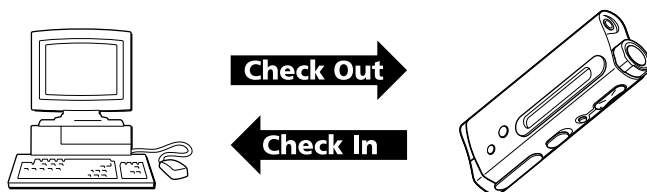

The supplied OpenMG Jukebox software allows you to import digital sound data to the hard drive of your computer as follows:

– downloads sound data provided by Electronic Music Distribution (EMD) services over digital networks such as the Internet (Please refer to the online help.)

– records audio CDs onto the hard drive of your computer (the imported tracks are compressed and encoded in ATRAC3 format) (See pages 13 – 14.)

– encodes the existing MP3 and WAV format audio files to ATRAC3 and encrypts them in OpenMG format. (Please refer to the online help.)

The OpenMG Jukebox encrypts sound data in OpenMG format and stores it on the hard drive of your computer to prevent unauthorized distribution.

Transfer of sound data from your computer to Network Walkman "Check-In/Out"

The supplied application software (OpenMG Jukebox) enables you to transfer the sound data stored on your computer's hard drive to Network Walkman (Check-Out) and transfer it from Network Walkman to your computer (Check-In).

Check-In/Out has the following features:

– **You can have 3 simultaneous "Check-Outs" of a song.** (Some audio contents will vary.)
– **Songs "Checked-Out" from one computer cannot be moved to another computer. Songs must be "Checked-In" to the computer from which they were "Checked-Out."**

For details, see "Glossary" on page 32.

On copyright protection

The OpenMG technology* allows you to enjoy digital music, while maintaining the copyrights of its holders.

Network Walkman has some features on recording and playback to protect copyrights.

For details, see "Features of copyright protection by OpenMG" on page 33.

* The copyright protection technology of Network Walkman conforms to the SDMI (Secure Digital Music Initiative) specifications.

Restrictions on sound data

Some sound data is distributed with restrictions on recording or playback of the data to maintain the copyrights of its holders.

Network Walkman employs copyright protection technology that enables you to record or play music within the limits determined by the copyright holders. For example, songs which have playback period restrictions can be played back only within the given period of time.

Other features

- Compact size, light weight
- Anti-skip function: you can enjoy uninterrupted enjoyment of music during physical activities such as jogging or commuting.
- Select record time: up to 30 min., 40 min., 60 min.*
- Full-dot LCD screen: song titles and artist names can be displayed.
- Shuttle switch: easy to operate.
- High speed data transfer using the supplied dedicated USB cable.
- OpenMG Jukebox software enables you to record compact discs using the ATRAC3 format (high sound quality, high compression) to the hard drive.

* Differs according to the bit rate when recording. In this case, the figures for the recordable time are when recording at 132kbps, 105kbps, and 66kbps.

System requirements

- IBM PC/AT or Compatible
  CPU: MMX™ Pentium® 233MHz or higher
  Hard disk drive space: 20MB or more
  RAM: 64MB or higher
  CD-ROM drive
  Sound Board
  USB port
- Operating System: Windows® 98/Windows® 98 Second Edition (manufacturer installed)
- Display: High (16bit) Color or more (800 × 480 dot or more)
- Internet access: for Web registration and EMD services

Note

We do not assure trouble-free operation for all computers satisfying the system requirements.

About this manual

This manual explains how to operate Network Walkman. For details on how to use the supplied software (OpenMG Jukebox), refer to the OpenMG Jukebox Help files.

To use the Help files

Displaying the Help files

The supplied software includes two types of Help files:

– OpenMG Jukebox Help: Help files on how to use the OpenMG Jukebox software.
– Network Walkman Help: Help files on how to use Network Walkman when connected to a computer.

You can display the Help files by either of the following ways:

– Click [Start]-[Programs]-[OpenMG Jukebox]-[OpenMG Jukebox Help] or [Network Walkman Help].
– Start the OpenMG Jukebox software, then click [Help]-[OpenMG Jukebox Help] or [Network Walkman Help].

Selecting a topic from the contents

• Double click ❖ to display the items included in the title.
• Double click 🖹 to display the contents of the item.
• Click the underlined item to display reference page on the item.
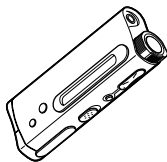

Searching using a keyword

1 Select the [Index] tab from the Help dialog box.
The Keyword list appears.

2 Enter the keyword you want to apply, or scroll through the keyword list.

3 Select a topic, then click [Display].
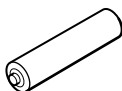Topics related to the keyword appear.

Step 1: Unpacking

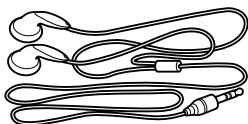Your Network Walkman comes with the following items.
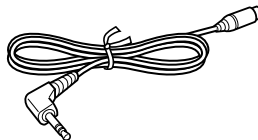
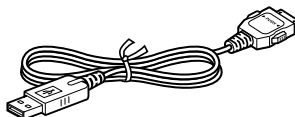• Network Walkman (1)

• Size AAA (LR03) (1)

• Headphones (1)

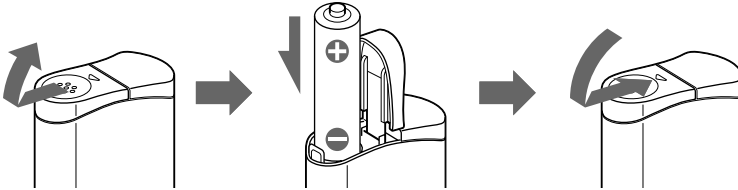• Headphones extension cord (1)

• Dedicated USB cable (1)

• Strap (1)
• CD-ROM
  (OpenMG Jukebox installation disc) (1)
• Operating Instructions (1)

Note

Be sure to keep the CD-ROM and CD key in a
secure place.

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Step 2: Inserting the battery

Insert the size AAA (LR03) alkaline battery (supplied) with correct polarity. Be sure to insert it from the ⊖ side as illustrated.
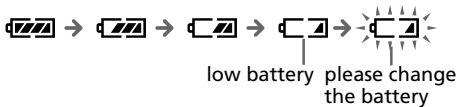

Battery duration

About 5 hours.*.

* The battery life may be shorter due to operating conditions and the temperature of the location.
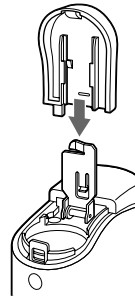
On the remaining battery indication

The battery icon in the display changes as shown below.

low battery please change
the battery

If "LOW BATT" is displayed in the display, you need to change the battery.

Notes

If you do not use the battery correctly, it may become damaged from leakage and corrosion. For best results:

- Use the alkaline battery.
- Make sure the polarity is correct.
- Do not charge a dry cell battery.
- Remove the battery, if you do not intend to use the player for an extended period of time.
- If you have battery leakage, replace with a new battery after cleaning the battery compartment.

If the battery compartment lid is accidentally detached, attach it as illustrated.

Step 3: Installing the OpenMG Jukebox software

This section describes how to install the OpenMG Jukebox software to your computer. Before installation, turn on your computer, and start Windows 98.

Note

Be sure to install the software **before** connecting Network Walkman with the supplied dedicated USB cable. Do not install the software while connecting the dedicated USB cable. Connect the dedicated USB cable only after you have restarted the computer after installation.

1 Insert the supplied CD-ROM into the CD-ROM drive of your computer.

The Setup program automatically starts and the following window appears. If the program does not start, double-click [Setup.exe].

2 Follow the instructions in the Installer window to complete the installation.

When the Input window for the CD key appears, input the CD key written on the CD-ROM case label.

When the installation is finished, the following dialog box appears in the display.

Click [Finish] to restart the computer.

Note

Do not delete, move or modify the installed folder.

About the "OpenMG Registration" icon on the desktop

When you restart the computer after installing the software, the "OpenMG(NW-E3&E2) Registration" icon will appear on the desktop. Make sure that you can connect to Internet, then double-click this icon to start customer registration for this product (Network Walkman) and for the EMD services.

For details on registration, refer to the supplied leaflet in the box.

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Notes on EMD (Electronic Music Distribution) services

To use OpenMG-enabled EMD services on the Internet, the following conditions are required.

- You need Internet access from your computer. (Sign up an Internet service provider.)
- You need to download several programs (e.g., EMD key installer).
  To download these programs, double-click the "OpenMG Registration" icon, then follow the displayed instructions.
- You need to register yourself with the EMD service provider you are going to use. Consult the provider for details.

Notes for existing OpenMG Jukebox users

1 In order to update your OpenMG Jukebox software, your current software must be registered. If your software is not registered, please register your current software now. If you are a registered user, proceed to step 2.

2 Insert the CD-ROM supplied with your new product. This will automatically run. If the program does not start, double-click [Setup.exe].
Please follow the on-screen instructions to retain all existing music files and update your software.

3 After your update is completed, restart the computer.
Then double-click the "OpenMG(NW-E3&E2) Registration" icon on your desktop and follow the instructions to register.

Notes

- If the OpenMG Jukebox icon is displayed on the task tray, right-click the icon to choose [Remove from the task tray], then proceed with the installation.
- Be sure to input the CD keys of the CD-ROM you are going to install. If an error message appears in the display, check if the CD keys are of the correct CD-ROM case label.

Transferring music data from the computer to Network Walkman (Check-Out)
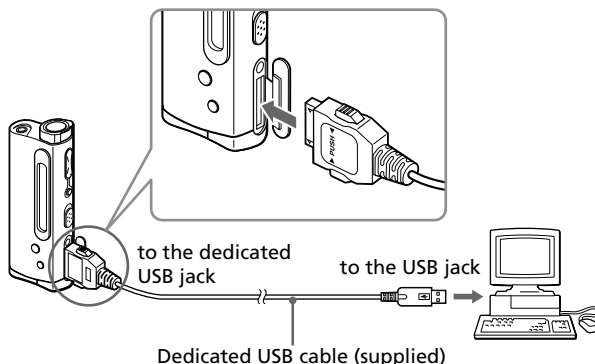
This section describes how to record the contents of a compact disc onto the hard drive of your computer, and then how to transfer it to Network Walkman (Check-Out).

You can also download by using EMD Services, or convert MP3 files and WAV format audio files. Please refer to the online help for more information.

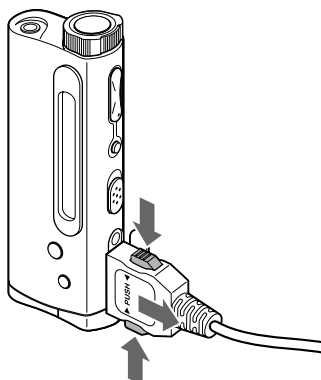**1** Connect Network Walkman to your computer.

Connect the wide connector of the supplied dedicated USB cable into the dedicated USB jack on Network Walkman, then the narrow connector to the USB jack of your computer.
"CONNECT" appears in the display.

to the dedicated USB jack

to the USB jack

Dedicated USB cable (supplied)

To remove the USB connector from Network Walkman

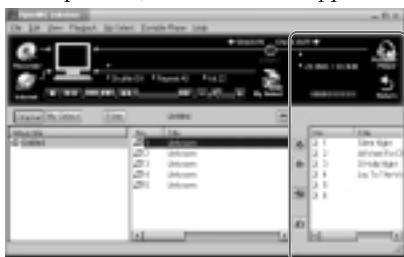While pressing the buttons on both sides of the connector, pull it out.

Notes
- Do not connect more than two USB devices to your computer. Normal operation will not be guaranteed.
- Use of this player with a USB hub or a USB extension cable is not guaranteed.
- A malfunction may occur depending on the USB devices connected at any one time.
- Be sure to insert the battery into Network Walkman when connecting it to your computer.
- When connecting Network Walkman to your computer for the first time, the USB driver Installer window appears. Please follow the instructions in the Installer window.
- Connect Network Walkman only as necessary. Disconnect the dedicated USB cable while you do not use Network Walkman with the computer connected.

2 Start the OpenMG Jukebox software.

Double click the OpenMG Jukebox icon on the desktop or click [Start]–[Programs]–
[OpenMG Jukebox]–[OpenMG Jukebox].

The OpenMG Jukebox window appears.

Portable Player window
(The music files inside Network
Walkman appear.)

☼If the Start-Up function is ON

The OpenMG Jukebox software automatically starts when Network Walkman is connected to your
computer. (Please refer to the online help for more information.)

3 Start recording.

You can record music from a compact disc onto the hard drive of your computer, using the
OpenMG CD Recorder software.

1 Insert the compact disc you want to record into the CD-ROM drive of your computer. If
the OpenMG CD Recorder automatically starts, go to 3.

2 Click the [Recorder] button in the OpenMG Jukebox window.
The OpenMG CD Recorder window appears showing the contents of the compact disc.

If the message "Do you want to check your CD Drive to optimize for recording ?" appears in the display

This message appears when you use the OpenMG CD Recorder for the first time. We recommend you
to choose [Yes]. You can optimize the CD drive later, too. Please refer to the online help for more
information. (It may take up to 20 minutes to optimize the CD drive.)

3 Click ●.

bit rate

● button

The recording begins. When recording is finished, the recorded music will appear in the
OpenMG Jukebox window as a new album.

Basic Operations

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To stop the recording

Click ■. The recording will be interrupted.
Click ● again to continue the recording.

☼ **To select only certain items**

Click the check box of the contents you do not want to record to remove the check, then click ●.

☼ **On the bit rate**

You can choose the bit rate (page 17, 32) among 132kbps, 105kbps, 66kbps. If you choose a higher bit rate, recording will have better sound quality, however the recordable time will be shorter. If you choose a lower bit rate, you can record longer, however the sound will not be as good. See below for the recording time according to the bit rate.

• 132kbps: maximum 30 min.
• 105kbps: maximum 40 min.
• 66kbps: maximum 60 min.

(The recording time differs according to the number of songs you are recording.)

To choose the bit rate, click [Control]-[Settings]. The Settings window appears. Click the Recording Setup tab and choose from the ATRAC3 Bit rate list. Please refer to the online help for more information.
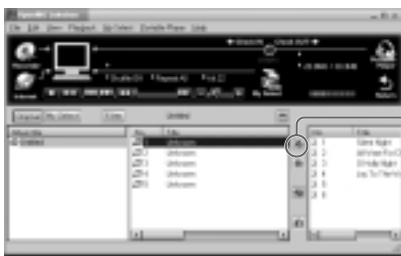
☼ **To name a new album or song**

You can enter the name using the keyboard or bring the name from the Internet database.
Please refer to the online help for more information.

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4   Transfer the music file to Network Walkman (Check-Out).

① Check that the Portable Player window (page 13) is displayed on the right side of the OpenMG Jukebox window.

② Click the album which contains the songs you want to Check-Out.
The contents of the album appear.

③ Click the music item you want to Check-Out.
Click the music item while pressing the Ctrl key to choose more than one music item.

④ Click the ⇨ button.
The desired music item appears in the Portable Player window as Check-Out candidate.

Click here

To cancel the song added as Check-Out candidate, click the respective song in the Portable Player window, then click the 🎧 button.

⑤ Click the START button.
The desired music item is Checked-Out to Network Walkman.
During Check-Out, the STOP button flashes and "ACCESS" flashes in the Network Walkman's display. When Check-Out is finished, the ⇨ indication changes to ♪.

To quit Check-Out

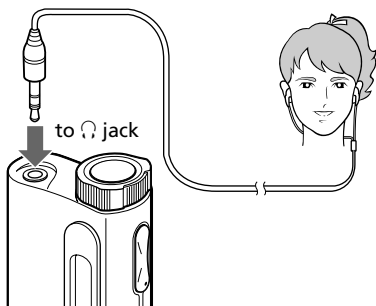Click the STOP button.

To Check-In

Listening to music with Network Walkman
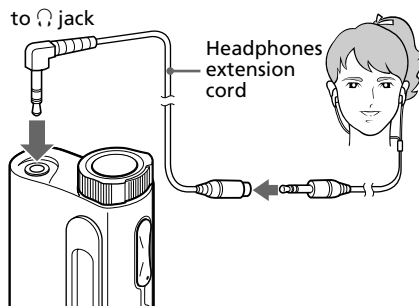
Please insert the battery before use (see page 9).

Note

When using Network Walkman, be sure to disconnect it from the computer.
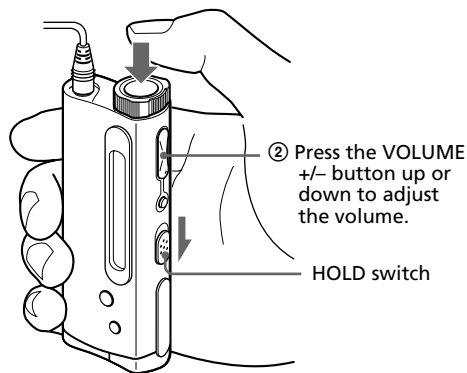
1 Connect the headphones.

To use the headphones extension cord

to ⌒ jack

to ⌒ jack

Headphones
extension
cord

2 Start playback.

① Press the ▶■ button

② Press the VOLUME +/– button up or down to adjust the volume.

HOLD switch

Playback stops automatically when the music reaches the end (only when the REPEAT mode is off).

If playback does not start

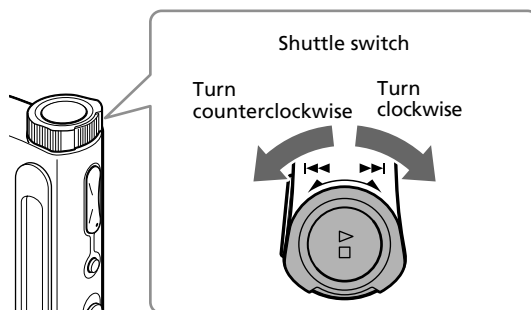The HOLD switch may be switched up. Please release it down (page 21).

To stop playback

Press the ▶■ button.

Tip

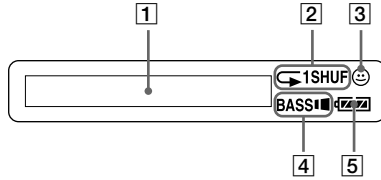If you do not operate the player for 3 seconds while in stop mode, the display automatically turns off.

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On other operations

Shuttle switch

Turn counterclockwise   Turn clockwise

To	Operation of the shuttle switch
Go to the beginning of the next track	Turn clockwise once.
Go to the beginning of the succeeding tracks	Turn clockwise continuously.
Go to the beginning of the actual track	Turn counterclockwise once.
Go to previous tracks	Turn counterclockwise continuously.
Go forward *	While playback, turn clockwise and hold still.
Go backward *	While playback, turn counterclockwise and hold still.

* If you turn the shuttle switch and hold still for more than 5 seconds during playback, the search speed increases.
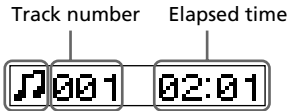
On the display

1 Text/graphic information display (page 20)

The following information is displayed according to the display mode.

• Elapsed time mode

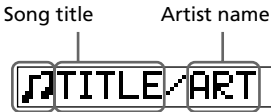Track number   Elapsed time

Play status
During playback: ♫ or ♫ is displayed alternately.
In stop mode: ♫ is displayed.
While locating tracks: ►►I or I◄◄ is displayed.
While searching a point in a track: ►► or ◄◄ is displayed.

• Title mode

Song title   Artist name

Play status

• Graphic mode

Spectrum analyzer

Bit rate (page 14, 32)
▉: songs recorded at 132kbps
▉: songs recorded at 105kbps
▉: songs recorded at 66kbps
▉: songs recorded at 47kbps*

* If you convert a monaural audio MP3/WAV file, the bit rate will be 47kbps.

2 Play mode indication (page 20)
The selected play mode is displayed.

3 AVLS indication (page 19)
The indication lights up while the AVLS function is activated.

4 MEGA BASS indication (page 19)
The indication lights up while the MEGA BASS function is activated.

5 Battery remain indication (page 9)
The remaining battery power is displayed.

Transferring data from Network Walkman to the computer (Check-In)

You can return the tracks recorded on Network Walkman back to the hard drive of your computer (Check-In). You can return them only to the same computer from which the tracks have been Checked-Out.

1 Connect Network Walkman to your computer and start the OpenMG Jukebox software.

The Portable Player window appears. See pages 12 and 13 for details.

2 Click the track you want to Check-In in the Portable Player window, then click the ⬅ button.

Click the track while pressing the Ctrl key to choose more than one track.

To Check-In all the tracks, click the ⬅ button.

3 Click the START button.

The desired tracks are Checked-In. During Check-In, the STOP button flashes. When Check-In is finished, the song titles disappear from the Portable Player window.

To cancel Check-In

Click the STOP button.